The main objective of the research project in which students will be involved is to better understand the pattern of China-funded investments in African roads, railways and ports, including whether infrastructure funded by China is likely to increase the flow of minerals from Africa to China and create a friendlier trading environment for Chinese firms. The project will use an economic model of spatial interactions to compare the predicted effects on market access of African transport infrastructure investments funded by China as compared to infrastructure funded by the World Bank. Students will assist in assembling data on these infrastructure investments.

The directed research project will proceed as follows, with implications for student learning as noted:

- We will first carefully discuss the research project as a whole: the research question, the related academic literature, the tasks involved in putting together data for the project, the methodology to be used in analyzing this data and the implications of the conclusions for public policy. This will help students to gain a global perspective on the nature and conduct of a major (multi-year) research project in economics.

- Students will then be given a tutorial in how to use GIS software. Students’ familiarity with such software could be useful in a variety of potential future careers.

- Each student will choose a subset of African countries, and will assemble information on projects funded by China and by the World Bank in those countries. In doing so, students will learn about the design of transportation networks, the nature of large infrastructure projects and African geography.

- Students will compile the above information into GIS maps and a database of project-specific information. This will give the students experience in the use of GIS software, and also in searching for, classifying and organizing information in textual form.

- Students will be expected to support one another, share best practices and ensure consistency across their individual contributions to the project, which will help to build teamwork skills.